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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,346	04/12/2004	Shek Fai Lau	SHPR-1361USJ	4739
29190	7590	11/25/2005	EXAMINER	
BELL, BOYD & LLOYD LLC P.O. BOX 1135 CHICAGO, IL 60690-1135			CHIESA, RICHARD L	
			ART UNIT	PAPER NUMBER

1724

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,346

Applicant(s)

LAU ET AL.

Examiner

Richard L. Chiesa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/28/05 & 10/12/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings filed with the application on April 12, 2004 are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the germicidal light source must be shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicants will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

2. The disclosure is objected to because of the following informalities: (A) The specification fails to indicate that related application serial numbers 09/924,600 and 09/730,499 are now U.S. Patent Nos. 6,709,484 and 6,713,026, respectively. (B) Applicants are reminded that upon filing of the required replacement drawings noted above in paragraph 1, the specification must be accordingly corrected to fully describe these new drawings. Appropriate correction is required.

Claim Objections

3. Claim 28 is objected to because the word --of-- should apparently be inserted between “comprised” and “an” on the first line. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

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later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-14, and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,350,417 (Lau et al) in view of any one of U.S. Patent Nos. 5,993,738 (Goswani), 6,149,717 (Satyapal et al), or 6,911,186 (Taylor et al). Lau et al (note Figures 6A-D, 7A-E) disclose an electric air cleaner with emitter electrodes 232, collector electrodes 242, pylons 627, and barrier wall with a lip 665 (note col. 14, line 1 to col. 16, line 26) substantially as claimed. It would appear that Lau et al may not explicitly mention the use of a germicidal lamp within the air cleaner. However, any one of Goswani (note ref. num. 98, Fig. 5, and col. 6, line 9 to col. 7, line 10), Satyapal et al (note ref. num. 50, Fig. 2, and col. 2, line 18 to col. 5, line 11) or Taylor et al (note ref. num. 290, Figs. 5A-B, 6, col. 1, lines 6-12, and col. 12, line 57 to col. 14, line 23) teaches the well-known use of a germicidal lamp in an electric air cleaner for the purpose of removing microorganisms in the air being treated. Consequently, it would have been readily obvious to one of ordinary skill in the art to employ a germicidal lamp in the Lau et al electric air cleaner in order to facilitate the removal of microorganisms as taught by any one of Goswani, Satyapal et al, or Taylor et al.

7. Claims 15-21, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1-14, and 22-27 in paragraph 6 above, and further in view of U.S. Patent Application Publication No. 2003/0233935 to Reeves et al. The prior art, as described above in paragraph 6, discloses an electric air cleaner substantially as claimed with the

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apparent exception of an emitter electrode cleaning object with a bore. In any case, Reeves et al (note Figs. 7A-E, 8A-C, ref. num. 600, 677, and page 9, paragraph [0105] to page 11, paragraph [0115]) teach the well-known use of an emitter wire electrode cleaning object with a bore for the purpose of ensuring efficient removal of collected particles. Therefore, it would have been obvious to one having ordinary skill in the art to employ an emitter wire cleaning object with a bore in any one of the prior art electric air cleaners in order to facilitate particle removal as taught by Reeves et al.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The prior art submitted by applicants on April 28, 2005 and October 12, 2005 have all been entered, considered and made of record.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-1700.

Facsimile correspondence must be transmitted through (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Richard L. Chiesa
November 21, 2005

Richard L. Chiesa

**RICHARD L. CHIESA
PRIMARY EXAMINER
ART UNIT 1724**

Nov. 21, 2005